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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/113,094 | 07/10/1998 | KIA SILVERBROOK | IR14US | 7673 |

7590 09/30/2005

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EXAMINER

YE, LIN

| ART UNIT | PAPER NUMBER |
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2615

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/113,094 | SILVERBROOK, KIA | |
| | Examiner | Art Unit | |
| | Lin Ye | 2615 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 2/22/02 have been fully considered but they are not persuasive as to claims 1-4.

For claims 1-4, the applicant argues that there is no motivation to combine the McIntyre reference (U.S. Patent 5,894,326) with the Cane reference (U.S. Patent 5,999,203), because the primary reference (McIntyre) teaches away from the proposed combination (See REMARKS Page 2, lines 6-13).

The examiner disagrees. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The examiner understands that the McIntyre reference focuses on an optical printer included in the hand held electronic camera system. But McIntyre never states that the hand held electronic camera system cannot include other types of printers such as an ink-jet printer. The Cane reference teaches in Figures 1, 6 and 10-13, a hand held camera system (as shown in Figures 10-13) including an image sensor device (CCD, see Col. 4, lines 13-22) for sensing an image; and a printing assembly for providing instant images. Alternatively, the printing assembly can be a dot matrix printer, an ink-jet printer or other appropriate type of printer (See Col. 7, lines 48-55). The Cane reference is evidenced that one of ordinary skill in the art at the time of the invention to see more advantages for the hand held camera system

has more flexible options to including any appropriate type of printer such as ink-jet printer for printing out instant images so as to provide an improved printer assembly that may be easily loaded with paper and easy to use an electronic imaging camera especially adapted for children (See Col. 1, lines 37-43). For that reason, it would have been obvious one having ordinary skill in the art at the time of the invention was made to modify the camera printer system of McIntyre by providing an inkjet printer or other appropriate type of printer as taught by Cane.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over McIntyre et al. U.S. Patent 5,894,326 in view of Kojima U.S. Patent 5,233,414 and Cane et al. U.S. Patent 5,999,203.

Referring to claim 1, the McIntyre reference disclose in Figures 1-2, an hand held electronic camera system including an optical printer (30) being adapted to be optically coupled to the display when in its print position for producing a hard copy output of the subject represented by the display; said camera system including: an image sensor device (CCD 20, see Col. 2, lines 51-55) for sensing an image; a processing means (central

processing unit 32a) for processing said sensed image; and a printing system (30) including a print head (240a and 240b, see Col. 5, lines 18-25) for printing out said sensed color image; wherein the method of color correction (color balance correction is inherent for per-channel color correction, the applicant states “per-channel color correction is what is intended by “color correction”) said sensed image before printing comprises (See Col. 4, lines 62-64); receiving input from a user indicating that the image is to be sensed (e.g., user pushes shutter button for capturing image); in response to the input, utilizing said image sensor device to sense a first image a first scene (e.g., to create an image of correct density and color balance on the media 224, see Col. 4, lines 63-67); sense a second image in rapid succession to the first image (e.g., digital camera can rapidly sense a plurality of images of the scene inherently) and printing out said second image by said print head (e.g., the user determines which image to be printed, see Col. 4, lines 55-59). However, the McIntyre reference does not explicitly disclose determining the color characteristics of first image, utilizing the imaging sensor without further user input to sense a second image of said same first scene, applying per-channel color correction to second image based on the determined color characteristics of said first image.

The Kojima reference teaches a color image processing apparatus processing the first image (prescan image) to determine color characteristics of said first image (e.g., color balance correction parameters of the prescan image, see Col. 7, lines 5-10); utilizing the image sensor (CCD 17-19) device without further user input (without waiting for the key input) to sense a second image (main scan image) of said same first scene, in rapid succession to said first image, wherein content of said second image is substantially identical

to said first image; applying per-channel color correction (per-channel color balance correction) to said second image based on the determined color characteristics of said first image (See Col. 7, lines 13-22). The Kojima reference is evidenced that one of ordinary skill in the art at the time of the invention to see more advantages for the image processing system applying a color correction on the second image based on the color characteristics of the first image so that the system can automatically (e.g., without further user input) output a plurality color image with consistent color characteristics (See Col. 1, lines 23-40). For that reason, it would have been obvious one having ordinary skill in the art at the time of the invention was made to modify the camera printer system of McIntyre by providing a color correction method for determining the color characteristics of first image, utilizing the imaging sensor without further user input to sense a second image of said same first scene, and applying per-channel color correction to second image based on the determined color characteristics of said first image as taught by Kojima.

The McIntyre reference does not explicitly show the printing system include other type of printer such as ink-jet printer instead of only optical printer.

The Cane reference teaches in Figures 1, 6 and 10-13, a hand held camera system (as shown in Figures 10-13) including an image sensor device (CCD, see Col. 4, lines 13-22) for sensing an image; and a printing assembly for providing instant images. Alternatively, the printing assembly can be a dot matrix printer, an ink-jet printer or other appropriate type of printer (See Col. 7, lines 48-55). The Cane reference is evidenced that one of ordinary skill in the art at the time of the invention to see more advantages for the hand held camera system has more flexible options to including any appropriate type of printer such as ink-jet printer

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for printing out instant images so that providing an improved printer assembly that may be easily loaded with paper and easy to use electronic imaging camera especially adapted for children (See Col. 1, lines 37-43). For that reason, it would have been obvious one having ordinary skill in the art at the time of the invention was made to modify the camera printer system of McIntyre by providing an inkjet printer or other appropriate type of printer as taught by Cane.

Referring to claim 3, the Kojima reference discloses that examining the intensity characteristics (exposure level) of the first image (pre scan image, see Col. 7, lines 6-10).

Referring to claim 4, the Kojima reference discloses wherein said processing step determines a maximum and minimum intensity of first image (pre scan image) and utilizes intensities to rescale the intensities of said second image (main scan image) (e.g., determining the correction parameter for correcting the second image based on the color characteristics of the first image, the magnitude of correction parameter has a predetermined range – as the difference of maximum and minimum intensity of first image, see Col. 9, lines 25-35 and Col. 9, lines 55-62).

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over McIntyre et al. U.S. Patent 5,894,326 in view of Kojima U.S. Patent 5,233,414, Cane et al. U.S. Patent 5,999,203 and Miyagawa et al. U.S. Patent 6,281,533.

Referring to claim 2, the McIntyre and Kojima references disclose all subject matter as discussed in respected claim 1, except the references do not explicitly state that exact time for the image sensor to sense a second image from first image.

The Miyagawa et al. reference discloses in Col. 19, lines 61-65, clearly states a high performance compact still digital camera system (Figure 25) that can take a number of pictures successively **within a second**. This means the second image is sensed within 1 second of first image. In col. 19, lines 56-58 sets forth the motivation to keep the image readout rate short within 1 second in the digital camera art for reducing power consumption level and a low voltage level and produce high quality pictures with a good S/N ratio. For that reason, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to see McIntyre's camera system has this kind of ability.

Conclusion

5. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lin Ye whose telephone number is (571) 272-7372. The examiner can normally be reached on Mon-Fri 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DAVID L. OMETZ
SUPERVISORY PATENT
EXAMINER

Lin Ye
Examiner
Art Unit 2615

September 16, 2005